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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,147	04/01/2004	Richard L. McClellan	040193	9009
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KIRKPATRICK & LOCKHART PRESTON GATES ELLIS LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			EXAMINER	DANNEMAN, PAUL
			ART UNIT	PAPER NUMBER
			3627	
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			04/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,147	<b>Applicant(s)</b> MCQUELLAN ET AL.
	<b>Examiner</b> PAUL DANNEMAN	<b>Art Unit</b> 3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 01 April 2004.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-21 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 11 April 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)              | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449/68) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>21 Apr 2004, 1 Nov 2005, 24 Aug 2006</u> .                      | 6) <input type="checkbox"/> Other: _____                          |



**DETAILED ACTION**

**Status of the Claims**

1. This action is in response to the application filed on 1 April 2004.
2. Claims 1-21 have been examined.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 1-14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salvo et al., US 6,341,271 B1 hereafter known as Salvo.**
  6. **Examiner's note:** Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the content of the passage as taught by the prior art or disclosed by the Examiner.

**Claims 1, 2, 3, 19, 20, and 21:**

With regard to the limitations:

- *Measurement instrument sending signal representing amount of inventory in container.*
- *Telemetry unit to send data from measurement instrument.*
- *First server receiving signal from Telemetry unit and converting it to inventory information.*
- *Second server receiving from First server inventory information for presentation on website.*

Salvo in at least Column 2, lines 57-67 and Column 3, lines 1-7 discloses an inventory managed system which has at least one storage receptacle for storing inventory, at least one amount indicator to determine the inventory in each receptacle, each amount indicator generating inventory amount signals representative of inventory amounts in the receptacle and a site controller 112 (Salvo, Column 4, lines 59-67 and Fig.1) that receives signals from the amount indicators and forwards the signals to the control unit 114 (Salvo, Column 5, lines 1-10) and converts the signals to determine the amount of inventory in each receptacle. Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be either hardwired or wireless Ethernet signals and wireless Internet and web signals as well as other wireless connections. Therefore, it would have obvious, at the time of the invention, to one of ordinary skill in the art to determine that Salvo's amount indicators, site controller and control unit are similar in function to applicant's measurement instrument, first server and second server with wireless connections.

**Claim 4:**

With regard to the limitation:

- *Container is one of a tank, bin, silo, vessel and storage arrangement.*

Salvo in at least Column 4, lines 12-22 discloses that the receptacles are any appropriate storage device, such as, but not limited to, a silo, storage bin, hopper, and bag, and combinations thereof. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Salvo's containers are similar to the applicant's.

**Claims 5, 6 and 13:**

With regard to the limitations:

- *Inventory material is one of a gas, liquid, aging product, food product, fabricated component, hardware, raw material and physical good.*
- *Measurement instrument is one of a Thermocouple, Ultrasonic Sensor, pressure sensor, sound sensor, or radar sensor.*
- *Inventory material info is one of material identity, container level, inventory amount, inventory temperature, inventory flow rate, specific gravity, moisture content, weight, container specifications, network specifications, usage information, delivery information, user information and workplace information.*

Salvo does not specifically disclose the type of inventory material, per se. However, Salvo in at least Column 4, lines 31-44 discloses that the amount indicator used to provide signals indicative of an inventory amount includes a level sensor, weight indicator, volume analyzer, and other devices that permit determination of the amount of inventory in a receptacle. Furthermore the indicators may also measure amount influencing variables, such as, humidity and temperature. Salvo, in at least Column 4, lines 45-58 further discloses that the indicators may include ultrasonic and ultrasound level detectors, optical sensors, laser amount sensing detection, nuclear amount sensing detectors, load cells and other devices capable of detecting amounts. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to determine that Salvo's use of various types of indicators is indicative that Salvo's invention can be used to determine the inventory amount of any of the material specified in applicant's application.

**Claim 14:**

With regard to the limitation:

- *Website has one of Main Menu, Weekly Report, Daily Report, Individual Container Report, Delivery Entry, Delivery Summary, User Administration Menu and a Container/Location Administrator Menu.*

Salvo does not specifically disclose a website with periodic reports per se, however Salvo in at least Fig.2 discloses a web page containing real-time analyzed silo information and in Fig.3 further discloses a web page containing historical trend analyzed information for a receptacle at a manufacturing site. Salvo in at least Column 11, lines 18-36 further discloses that the inventory management system provides real-time, analyzed information concerning inventory in easily readable formats, including, but not limited to, formats accessible over the Internet. Alternatively, the inventory information can be accessed by voice mail, email, telephone, facsimile, Internet messages, pages, and other communication modes. Salvo in at least Column 11, lines 64-67 and Column 12, lines 1-13 and Fig.3 still further discloses a link for obtaining historical trend information and in Column 12, lines 14-18 still further discloses the analyzed and historical inventory information being encrypted and stored for reference and library purposes either locally or remotely. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Salvo inventory management system provides over a web page the information per applicant's limitation.

**Claims 7, 8, 9, 10, 11, and 12:**

With regard to the limitations:

- *Communication link between telemetry unit, measurement unit, and First server is a wired (Ethernet) or a wireless (RF, Wireless LAN).*

Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be but not limited to either hardwired or wireless Ethernet

signals and wireless Internet and web signals as well as other wireless connections (radio signals, short-wave signals). Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to conclude that Salvo provides and supports all the communication links between sensors and the site controller that the applicant has specified.

7. **Claims 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Salvo as applied to claim 1 above, and further in view of SOAP (P1-P4) (<http://xml.coverpages.org/soap.html>).

**Claims 15, 16, 17, and 18:**

With regard to the limitations:

- *One of the servers is configured to process one message and notification;*
- *Notification is one of Delivery, Inventory Level, or System Alert.*
- *Message and Notification are XML messages including Inventory information.*
- *Notification is a SOAP message, including Inventory Information.*

Salvo does not disclose the use of XML or SOAP messages per se. However, Salvo in at least Column 7, lines 55-67 discloses that the analyzed information is typically accessible anywhere and at any time, for example by phone, voice mail, fax, overnight and regular mail, courier and over the Internet. Salvo in at least Column 8, lines 5-25 discloses an alert generated by the control unit in response to the real-time pricing feature exceeding a limit. Salvo in at least Column 8, lines 51-59 further discloses the control unit and service center sending alerts to plant management at the manufacturing site and vendors when a critical event occurs such as shortages in inventory. The alerts are communicated via regular mail, email, telephone, pagers, facsimile, Internet messages and similar communications. It would have obvious, at the time of the invention, to one of ordinary skill in the art to modify Salvo by combining XML and SOAP as the messaging protocol since Salvo sends messages to various types of devices which use various formatting standards. The use of XML and SOAP allows for messages to be sent in a

plain format where the message will be formatted based on the end message receiving terminal's capability.

#### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

21 March 2008

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627